

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE
Washington 25, D.C.
July 1, 1962

11

TABLE OF CONTENTS

	Page
Introduction	
Area No. 1 Appraisal of Foreign Market Programs	
Area No. 2 Effect of Foreign Economic Development on Agriculture	
Area No. 3 Trade Statistics and Analysis	
Line Project Check List	

INTRODUCTION

Foreign Development and Trade Analysis Research is concerned with three areas: Appraisal of foreign market development programs, effect of foreign economic development on agriculture, and trade statistics and analysis. The research objectives are the appraisal and the evaluation of the economic implications of policies and programs on U.S. foreign trade in farm products and the efficient use of U.S. excess food production capacity and other resources in economic development programs abroad. The information thus gained is employed in improved formulation of national policies, positions, and programs in the areas of foreign agricultural marketing, foreign economic development, and foreign agricultural trade.

The research in Foreign Development and Trade Analysis is carried out in the Development and Trade Analysis Division of the Economic Research Service of the U.S. Department of Agriculture. In fiscal year 1962 approximately 19.0 professional man-years were devoted to research in the areas of foreign economic development and trade analysis, distributed as follows: 3.0 professional man-years to effects of Public Law 480 on economic development and trade; 1.0 to analysis of alternative farm export programs; 3.0 to monetary and financial analysis of trade and development programs; 1.0 to agricultural development loans of U.S. and international lending institutions; 1.5 to agriculture in foreign economic development programs; 1.5 to effects of economic development upon patterns of foreign trade; 0.5 to impacts of rural institutions and land policies on economic development and trade; 0.5 to impacts of foreign production, price, and marketing policies on agricultural development and trade; 5.0 to U.S. agricultural trade situation; 1.5 to U.S. and world agricultural trade statistics; and 0.5 to contracts with the Bureau of the Census and the Agency for International Development for data processing of trade statistics.

Exports of farm products are of major importance to the welfare of U.S. agriculture. Farm product exports in fiscal year 1962 totaled a record \$5.1 billion. Volume was equal to the record level established in fiscal year 1961. These exports were equivalent to 15 percent of cash receipts from farm marketings. They represented the production of one acre out of every five harvested. U.S. agricultural exports accounted for slightly over one-sixth of all agricultural commodities entering world trade. Thus, it is clear that agricultural exports are big business and that the enlarging of the foreign market for U.S. agricultural products is of major national concern. The research achievements in these areas have provided needed information to formulate policies, positions, and programs designed to strengthen an important segment of the nation's economic life. A few examples from the research areas covered in this report are presented here:

Record agricultural exports in 1961-62. The continued analysis of the current status of and outlook for U.S. agricultural exports reveals that the export

record of \$5.1 billion was 4 percent above the previous year's record of \$4.9 billion. Of this total, exports that moved for dollars totaled an alltime high \$3.5 billion while the value of Food-for-Peace shipments totaled \$1.6 billion. Sales for dollars accounted for over half of the total gain in U.S. agricultural exports in 1961-62 compared with 1960-61. Most of the increase in agricultural exports in 1961-62 over the previous year was brought about by wheat and feed grains -- the leading U.S. farm surplus commodities. In 1961-62 record exports were established for feed grains, wheat, soybeans, soybean meal, poultry meat, tallow, canned fruits, grapefruit, and nonfat dry milk. Tobacco exports reached an alltime high value of \$407 million.

Common Market Source Book developed. Essential statistical and other materials for analyzing the impact of the new Common Agricultural Policy (CAP) of the European Economic Community (EEC) on U.S. agricultural trade will be provided in a Common Market Source Book, which shows agricultural imports of the EEC by origin as well as information on financial trends of the EEC countries. The trade data include annual commodity summaries, quantity and value, for the years 1951 through 1960. The newly emerging European Economic Community -- better known as the Common Market -- has become one of the major economic areas of the world. The EEC poses both agricultural trade opportunities and problems to U.S. agriculture. The potential for increased agricultural trade is provided for some U.S. farm products; for others, prospects appear unfavorable because the EEC policies strongly favor internal suppliers over nonmember suppliers. Of the \$1.2 billion worth of U.S. farm products to the Common Market countries and associate, Greece, approximately 30 percent will be affected by EEC variable import levies.

State by State agricultural export study. The results of a nationwide study, which breaks down the record level of 1960-61 U.S. agricultural exports of nearly \$5 billion shows that each of the 48 States (Alaska and Hawaii not included) contributes a significant share to total exports of farm products to world markets. The two States with the largest share of agricultural exports were California (\$477.5 million) and Texas (\$446.5 million). Other important agricultural exporters were Illinois (\$320 million), Iowa (\$248 million), North Carolina (\$210.5 million), and Kansas (\$204 million). Many other States also share in the farm export market.

Public Law 480 shipments to Israel stimulate economic development and trade. The \$152 million of commodities imported by Israel under Title I of P.L. 480 and the investments financed with the Title I sales proceeds contributed significantly to the phenomenal growth of the Israeli economy during 1955-60 according to a report prepared by the Bank of Israel under a contract with USDA. Gross national product at constant prices increased 53 percent between 1955 and 1960; and imports, by 65 percent; for a total rise in resources of over 56 percent. Consumption by the private sector increased by 49 percent. Title I imports and the production resulting from Title I programs accounted for 3.6 percent of total resources in the peak year, 1959, and 11.5 percent of the increase in total resources over the 4-year period. The production resulting from Title I programs represented 2.7 percent of the GNP, and accounted for approximately 9 percent of the 1955-59 rise in GNP. The lasting effect of the program was to increase the GNP by 2 percent, thus accounting for 5 percent of its 1955-60 increase. P.L. 480 imports were accompanied by increased commercial purchases of farm commodities from the United States and greatly increased total imports from the United States and

other countries. The projections of present trends in population, consumption, and investment imply that within a decade Israel could export enough to finance its imports. This could mean that commercial purchases would be further increased and would replace those now being made under P.L. 480.

P.L. 480 reduces dollar drain. A study of the methodology used in recording agricultural exports in the U.S. balance of payments indicates that foreign currencies acquired under Title I through the sale of surplus agricultural commodities equivalent to \$1 billion in fiscal 1961 are utilized advantageously by the U.S. Government in financing part of its military and economic assistance commitments abroad. In the absence of these foreign currencies, the payments deficit would have increased by the equivalent dollar value of \$600 million in fiscal 1961, assuming no reduction in U.S. Government expenditures abroad and a consequent necessity of purchasing needed foreign exchange with dollars. The availability of foreign currencies eliminated the need to purchase such currencies for dollars and prevented any additional buildup of the already sizable foreign holdings of liquid dollar claims, and reduces the possibility of converting such claims into gold. Foreign assistance activities involving the sale of surplus agricultural commodities for foreign currencies under Title I, P.L. 480 or granted under Titles II and III, do not directly affect the recorded overall balance in U.S. foreign transactions -- measured by changes in gold and foreign currency holdings of U.S. monetary authorities and in U.S. liquid liabilities to foreign countries and international institutions.

Effects of economic development on U.S. agricultural markets. An ERS study now in progress indicates foreign markets for U.S. farm products expand with economic development and higher income levels in foreign countries. Preliminary estimates for 18 low-income countries (per capita annual incomes under \$500 in 1960) indicate that each 10 percent rise in per capita incomes from 1950 to 1960 was associated with an 11 percent increase in value of total annual agricultural imports from the United States. In 16 low-income countries (per capita incomes \$500 and above) a 10 percent rise in per capita incomes was associated with a 5 percent rise in agricultural imports. The 12 low-income countries took 34 percent of U.S. agricultural exports in 1960. The 16 high-income countries took 51 percent.

AREA NO. 1

APPRAISAL OF FOREIGN MARKET PROGRAMS

Problem. U.S. foreign market programs for farm products were a multiple function of stimulating and facilitating trade in farm products, encouraging economic development in the less-developed countries, raised nutritional levels in developing countries, and meeting temporary food shortages in disaster situations. Research is needed to determine the most efficient means of meeting these U.S. foreign policy objectives and to analyze the implications of such programs on incomes of U.S. farmers, U.S. farm supply-management programs and the efficient utilization of excess U.S. agricultural productive capacity. Exports of farm products under special Government programs totaled \$1.6 billion in fiscal year 1962 and may increase in importance in the years ahead. In addition to the special export programs, about 40 percent of the \$3.5 billion of commercial exports in 1961 received some assistance from payment-in-kind and concessional-price export programs.

Continuing research is needed to assess the effects of Government program exports on economic development and trade. Donations and gifts of food under Titles II and III of Public Law 480 to meet temporary and chronic food deficits, and barter sales under Title III should be evaluated in relation to Title I sales of local currencies and commercial dollar sales. In addition, the effects of short-term dollar credits extended by the Commodity Credit Corporation and the Export-Import Bank, as well as long-term dollar credits under Title IV of Public Law 480, should be analyzed. Levels of payment-in-kind assistance and their effects on foreign markets, domestic prices, and program costs also need to be analyzed. Possible modifications in these and other proposed farm export programs need to be studied.

Continuing research on the ability of foreign countries to finance food and fiber imports needs is necessary to provide guidelines to the departmental agencies concerned with the administration of the multi-purpose agricultural export programs. International monetary research is needed to determine where, when and how the United States can maximize dollar sales. When concessional sales are made to countries that are able to obtain part of their import requirements on a dollar basis, the type of special financing program employed should result in trade expansion that benefits both the United States and the recipient country.

Research is also needed to determine the extent to which foreign market programs will in the long run create additional markets for U.S. farm products and to harmonize U.S. foreign policy and U.S. domestic farm policy.

USDA PROGRAM

A. Effects of Public Law 480 on Economic Development and Trade. Special emphasis is being given to the study of the effects of the food and fiber exports under Public Law 480 on economic development and trade in important receiving countries. The analysis includes the following aspects: (1) effects on foreign trade and balance of payments, (2) impact on agricultural

production and food consumption, (3) the effectiveness of the investment of Title I funds in economic development, (4) utilization of the commodity supplied, (5) role in combating inflation, and (6) analysis of possible modifications to make the program more effective.

B. Analysis of Alternative Farm Export Programs. Recent discussions have emphasized that foreign export programs should be developed and designed to encourage the efficient utilization of surplus U.S. agricultural productive capacity rather than being limited to the disposal of available stocks, and also that plans and programs should be developed to cover a longer period of time in order to permit more effective programing and coordination with overall U.S. foreign economic policy objectives. A continuing analysis of the factors involved in proposed modifications of export programs and their implications is needed. Important aspects of these studies include appraisals of efficiency in meeting emergency food shortages, nutrition needs, program costs, and the nature of the domestic adjustments in agriculture required.

In view of the limitations of available professional personnel in farm export program research, activity is limited to special analyses requested for policy decisions and a few closely related studies. Analysis include the full range of Public Law 480 programs covering donations, disaster relief, sales for local currencies, barter, short- and long-term credits, payment-in-kind programs, other special export programs, and their inter-relationships among themselves and as they relate to commercial dollar sales. The analysis of food processing methods and techniques in collaboration with other agencies that would improve consumer acceptability of food products for export to the developing and industrial dollar paying countries and the implications of current and prospective commodity agreements on trade and prices of farm products should be emphasized because of their importance in the development of new and expanded markets.

C. Monetary and Financial Analysis of Trade and Development Programs. Continuing analyses of changing financial positions of foreign countries involves the tabulation and evaluation of economic factors, both external and internal, that affect a foreign country's ability to buy U.S. farm products with dollars or qualify for special U.S. concessional sales. This requires constant review and use of economic data supplied by U.S. foreign service reports, international institutions, such as the International Monetary Fund, the International Bank for Reconstruction and Development, and the Inter-American Development Bank; and other domestic and foreign sources. The financial data obtained from these sources provide a basis for determining appropriate U.S. export programs applicable to the financial position of the importing country. Individual country financial analyses are made on a request basis as the occasion demands.

Studies are conducted also on the U.S. balance of payments, gold and foreign exchange reserves of foreign countries, and their effect on foreign agricultural trade, competition, and development.

Current analysis of international monetary developments and the activities of the various international financial institutions provides the basis for evaluating USDA export objectives and goals. This continuing activity is basic to the Department's representation at the National Advisory Staff Committee, and for maintaining liaison with United States and international financial institutions.

D. Agricultural Development Loans of U.S. and International Lending Institutions. Research is needed on the potential effect of the agricultural development phases of foreign countries' economic development programs on U.S. agricultural exports. This research is intended to guide the Department in determining the impact of specific agricultural development loans considered by international lending institutions. Research is now under way in this area and the findings should be published in the near future.

The total Federal scientific effect devoted to research in this area is 8 professional man-years. ^{1/} Of this number 3 is devoted to Effects of Public Law 480 on Economic Development and Trade; 1 to Analysis of Alternative Farm Exports and interrelationship of foreign export programs and domestic farm programs; 3 to Monetary and Financial Analysis of Trade and Development Programs; and 1 to Agricultural Development Loans of U.S. and International Lending Institutions.

RELATED PROGRAMS OF STATE EXPERIMENT STATIONS AND INDUSTRY

State Experiment Stations in 1961 reported 7.0 professional man-years of research on world markets for U.S. farm products and the impacts of export procedures and programs.

Arizona and Michigan, assisted by funds from private sources are analyzing the effects of special export programs, particularly Public Law 480 on U.S. exports in the short and long run, how such sales can contribute to economic development, and the impacts on the U.S. economy. This research is being coordinated under IRM-1, Impacts of Agricultural Price and Income Programs. In another study, Michigan is appraising the possibility of more orderly marketing of exports, the relation between export volume and general economic activity abroad, and the interrelationships between governmental and private commercial policies. As a part of a regional project, W-59, Impact of Governmental Price, Income and Related Policies on Western Agriculture, Idaho is appraising the impact of the Public Law 480 programs on foreign markets for wheat from the northwest. Texas has analyzed the possibilities of developing European markets for Texas export commodities and evaluating the effectiveness of market development programs in Italy. California has a program of considerable size under way, including an analysis of the world's need for farm products and the changing relationships of U.S. agriculture to world markets. California also is studying agricultural development on the West Coast of Mexico and appraising the competitive position of this producing area with California producers in supplying U.S. markets. Another broad study deals with the international marketing of agricultural products, the relation between total world trade and trade in agricultural commodities, including the description of changes in trade patterns, the analysis of the effects of private and public practices and programs and potential foreign markets for California products.

Much basic and applied research is conducted by the International Monetary Fund, the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Organization for European Economic

^{1/} Public Law 480 contract research in foreign countries utilizing foreign currency amounted to the equivalent of \$204,890. Of this total \$33,700 was expended on the Israel study. Contracts currently under way are: Spain, \$38,333; Colombia, \$51,000; Turkey, \$65,000; and India, \$17,857.

Cooperation, the Economic and Social Council of the United Nations, and the Food and Agriculture Organization. The Federal Reserve and commercial banks also publish valuable "current situation" reports. In most instances, the objectives of the research conducted by these institutions or agencies bear directly on matters of particular concern to them and consequently do not meet the specific needs of USDA in the administration of programs or in the representation of agriculture on inter-departmental committees or working groups.

REPORT OF PROGRESS FOR USDA AND COOPERATIVE PROGRAMS

A. Effects of Public Law 480 on Economic Development and Trade

1. P.L. 480 shipments of Israel stimulate economic development and trade. The \$152 million of commodities imported by Israel under Title I of P.L. 480 and the investments financed with the sales proceeds from Title I commodities contributed significantly to the phenomenal growth of the Israeli economy during 1955-60 according to a report prepared by the Bank of Israel under a contract with USDA. Gross national product at constant prices increased 53 percent between 1955 and 1960, imports by 65 percent, for a total rise in resources of over 56 percent. Consumption by the private sector increased by 49 percent. For the peak year, (1959) Title I imports and the production resulting from Title I programs accounted for 3.6 percent of total resources, and 11.5 percent of the increase in total resources between 1955 and 1959. The production resulting from Title I programs represented 2.7 percent of the GNP, and accounted for approximately 9 percent of the rise in GNP between 1955 and 1959. The lasting effect of the program was to increase the gross national product by 2 percent, thus accounting for 5 percent of its increase between 1955 and 1960. P.L. 480 imports were accompanied by increased commercial purchases of farm commodities from the U.S. and greatly increased total imports from the U.S. and other countries. The projections of present trends in population, consumption and investment imply that within a decade Israel could export enough to finance its imports. This could mean that commercial purchases would be further increased and would replace a large share of those now being made under P.L. 480.

2. Analysis and assessment of the effectiveness of Public Law 480 Title I operation in Turkey. Under the terms of this contract the University of Ankara is entering into subcontracts with the Faculty of Economics, University of Istanbul, and the Robert College Research Center, Robert College, Istanbul, Turkey, which will collaborate on the project. An interim report covering progress of this research is to be made by December 1962.

3. Analysis and assessment of the effectiveness of Public Law 480 Title I operation in Colombia. A contract between the Economic Research Service and Michigan State University was completed to determine (1) the results and accomplishments of P.L. 480 programs in Colombia up to 1961 and (2) the future role of P.L. 480 Title programs in Colombia. The report covering phase one, which assesses the effects of Title I programs on prices, production, consumption, trade patterns, balance of payments, and the contribution that food assistance has made to economic development, will be made in November 1962.

4. Analysis and assessment of the effectiveness of P.L. 480 Title I operation in Spain. In a contract between the United States of America and Sociedad De Estudios Y Publicaciones, S.A., a group of Economists from the University of Madrid and the principal commercial banks in Madrid will work as a research team to do this study. This study is similar in nature to those being made in Turkey and Colombia; however, the Spanish experience in utilizing agricultural commodity assistance differs greatly from that in Turkey, Colombia, and most other countries. An interim report covering progress of the work to date is expected by December 1962.

5. Analysis and assessment of the effectiveness of P.L. 480 Title I operation in India. The research contracted with the Gokhale Institute of Politics and Economics to analyze the utilization of commodities supplied under the Title I program, and the effect of Title I imports on farm prices, production, and consumption of farm products in India is under way. A special analysis of the program on building up reserve stocks in India also will be made under this contract.

B. Monetary and Financial Analysis

1. P.L. 480 reduces dollar drain. A study of the methodology used in recording agricultural exports in the U.S. balance of payments indicates that foreign currencies acquired under Title I through the sale of surplus agricultural commodities equivalent to \$1.0 billion in fiscal 1961 are utilized advantageously by the U.S. Government in financing part of its military and economic assistance abroad. In the absence of these foreign currencies the payments deficit would have increased by the equivalent dollar value of \$600 million in fiscal 1961 assuming no reduction in U.S. Government expenditures abroad and a consequent necessity of purchasing needed foreign exchange with dollars. The availability of foreign currencies eliminated the need to purchase such currencies for dollars and prevented any additional build-up of the already sizable foreign holdings of liquid dollar claims, and reduces the possibility of converting such claims into gold.

Foreign assistance activities involving the sale of surplus agricultural commodities for foreign currencies under Title I, P.L. 480 or granted under Titles II and III, do not directly affect the recorded overall balance in U.S. foreign transactions -- measured by changes in gold and foreign currency holdings of U.S. monetary authorities and in U.S. liquid liabilities to foreign countries and international institutions.

2. Special economic analyses. Special economic studies on financial and monetary programs involving agricultural programs on the international level were made to determine the Department of Agriculture's position and policy. The many financial crises in Latin America have resulted in numerous, and continuing analyses of the economic situation in these countries to determine the justification for U.S. agricultural export programs. In recommending agricultural surplus disposal programs to foreign countries, special analyses were made to determine the type of program that would best service the commercial interest of the United States and at the same time derive the most benefit to the recipient country. The continuing serious balance of payments situation in the United States, and consequent loss of gold from U.S. holdings made it necessary to analyze all U.S. international agricultural programs from the highly technical point of view of the effect

on the U.S. balance of payments. Specific analyses were made on the effects from developments of the European Common Market on the U.S. balance of payments. Many additional financial studies were required with the rapidly increasing number of independent nations in Africa, the West Indies, and elsewhere. The expanded activities of the NAC (National Advisory Council on International Monetary and Financial Problems, established in accordance with the Bretton Woods Act) required a number of studies and analyses on international financial problems affecting the policy and programs of the Department of Agriculture.

3. Analysis of the role of agricultural credits in the development of the agricultural economy of foreign countries. Work on this project was initiated in 1962 in Israel, Turkey, Greece, and Yugoslavia to determine the importance of agricultural credits in the general development of the agricultural economy. Preliminary data have been collected for this project and arrangements have been made to receive additional data.

PUBLICATIONS

Effects of Public Law 480 on Economic Development and Trade

(1) Analysis and Assessment of the Economic Effect of the U.S. Public Law 480 Title I Program in Israel, by F. Ginor, Bank of Israel, Tel Aviv, Israel, October 1961.

(2) Summary and Evaluation of a Report on the Analysis and Assessment of the Economic Effect of the U.S. Public Law 480 Title I Program in Israel, by the Development and Trade Analysis Division, Export Programs Research, Economic Research Service, May 1962. (This summary will be processed for limited distribution along with the distribution of the full report prepared by the Bank of Israel).

Monetary and Financial Analysis

(1) Strengthened U.S. Balance of Payments Slows Rise in Foreign Dollar Reserves. July 1961, ERS-Foreign 12.

(2) Growth of Foreign Dollar Assets Slows as U.S. Payments Position Strengthens. October 1961, ERS-Foreign 17.

(3) Importance of U.S. Farm Exports to Balance of Payments. October 1962, Foreign Agricultural Economic Report No. 7.

AREA NO. 2

EFFECT OF FOREIGN ECONOMIC DEVELOPMENT ON AGRICULTURE

Problem. Agricultural expansion is a prime aim of plans for economic development in most underdeveloped countries, many of which have received increasing amounts of outside financial assistance in support of their economic development plans. Research is needed to provide a more accurate measure of progress made under such plans and a broader basis for gauging the effects of outside assistance, especially on the production, consumption and trade in farm products. Many foreign countries are reappraising or revising their agrarian structures, an issue which is becoming an increasingly important one in most underdeveloped countries and in which the U.S. Government is taking an increasing interest. Research is needed to analyze systematically and continuously the problems inherent in the present system of land and water resource use, of tenure and other agrarian institutions in these countries, and to bring out the probable effects of changes in the land system on their economic growth in general and their agricultural development and trade in farm products in particular. Farm production, price, and marketing programs and policies of foreign countries have important impacts on foreign trade and market outlets for U.S. farm products. Comprehensive study of these programs and policies is needed to provide an informed basis for evaluating their effects on economic growth and development of agriculture as well as of the national economy of foreign countries and for expanding market prospects for U.S. farm products.

USDA PROGRAM

A. Agriculture in Foreign Economic Development Programs. Available information about the role of agriculture in general economic development is being compiled and evaluated in order to provide an informed basis for developing detailed studies in underdeveloped countries with widely different natural resources, economic, and cultural conditions. This information is needed to establish a general classification by countries whereby agriculture's contributions to total development can be identified. Current information about agriculture's role in economic development suggests that its role changes with the level and rate of economic growth. The results of these preliminary investigations will be used to identify emerging problems and research opportunities for initiating detailed studies in particular countries. Knowledge of the relationship of agriculture to economic development in underdeveloped countries is needed to establish priorities for program efforts designed to promote economic growth.

The broad basis for gauging the effects of outside assistance implies a greater understanding of the theory of economic growth and the contributions that agriculture can make to this growth. To develop a greater understanding, detailed studies should be undertaken on particular aspects of the agricultural economy. Such studies would include (1) the general effects of different land tenure systems on agricultural productivity, (2) the returns on capital under different land use systems, (3) the effect of market development on productivity, capital accumulation, farm incomes, and adoption of farm technology, (4) the effects of domestic and foreign

trade on agricultural development, (5) the determination of investment priorities in agriculture and industry to achieve balanced growth, and others.

B. Effects of Economic Development Upon Patterns of Foreign Trade.

Changes in foreign trade of agricultural and other products that have accompanied economic development of selected countries are being studied to learn how different rates of economic growth have influenced foreign trade in general and markets for U.S. farm products in particular. The contributions of foreign trade to economic development will be identified so that important shifts in the components of foreign trade of a particular country can be related to the demand for U.S. farm exports. Identification and analysis of the implications of shifting patterns of foreign trade and emerging problems associated with these shifts resulting from economic growth in particular countries represents a major objective of these studies.

C. Impact of Rural Institutions and Land Policies on Economic Development and Trade. A number of foreign countries have requested technical counsel on problems associated with rural institutions and land tenure problems. In order to be of greater assistance to these countries, research is being planned on measures for acquiring and distributing land, consolidating small holdings, and planning and implementing land reform. Research on land reform will include methods of acquiring and compensating for land, means for transferring public land to private use, effects of landlord-tenant laws, requirements for credit, need for education and supporting activities, and effects of agrarian reform on economic development. The impact of different types of land reform on production, capital accumulation, per capita farm income, and improvements in social and political conditions will be appraised.

D. Impacts of Foreign Production, Price, and Marketing Policies on Agricultural Development and Trade. Information concerning production, price, and marketing programs and policies of foreign countries is being brought together to provide an improved basis for evaluating how they influence supplies of farm products available for export, market outlets for U.S. farm products, and agricultural development of foreign countries including use of land and other resources, resource productivity, and incomes of farm people. This compilation will also provide an informed basis for selecting countries with widely different economic and physical conditions and with widely different kinds of agricultural programs and policies for detailed study.

The total Federal scientific effort devoted to research in this area was 4.0 professional man-years. Of this number 1.5 was devoted to Agriculture in Foreign Economic Development Programs; 1.5 to Effects of Economic Development Upon Patterns of Foreign Trade; 0.5 to the Impact of Rural Institutions and Land Policies on Economic Development and Trade; and 0.5 to the Impacts of Foreign Production, Price, and Marketing Policies on Agricultural Development and Trade. In addition, .25 professional man-years was devoted to research grants to: Social Factors which Promote or Impede Changes in Agriculture Organization and Production at Tel Aviv, Israel; .8 on Marketing Rice in Colombia at Bogota, Colombia; 2.5 on the Relation of Management and Planning to Success in Farming at Helsinki, Finland; and 1.8 on the Study of the Economics of Alternatives Use of Land for Agriculture and Forestry at Helsinki, Finland.

RELATED PROGRAMS OF STATE EXPERIMENT STATIONS AND INDUSTRY

State Experiment Stations, industry, and other organizations do not report research in this area.

REPORT OF PROGRESS FOR USDA AND COOPERATIVE PROGRAMS

A. General. Exploratory analyses have been made in the four major problem areas as stated in the current program. Basic work has been initiated on the role of agriculture in foreign economic development and growth and on the effects of foreign economic development upon patterns of trade with special reference to effects on market outlets for U.S. farm products. Research literature relating to effects of rural institutional arrangements and agricultural price policies and programs on agricultural development in foreign countries are being reviewed in order to provide informed bases for planning detailed line projects in these research areas.

B. Effects of Economic Development Upon Patterns of Foreign Trade. An ERS study now in progress indicates that foreign markets for U.S. farm products expand with economic development and higher income levels in foreign countries. Preliminary estimates for 18 low-income countries (per capita annual incomes under \$500 in 1960) indicate that each 10 percent rise in per capita income from 1950 to 1960 was associated with an 11 percent increase in value of total annual agricultural imports from the United States. In 16 high-income countries (per capita incomes \$500 and above) a 10 percent rise in per capita income was associated with a 5 percent rise in agricultural imports. The 18 low-income countries took 34 percent of our agricultural exports in 1960. The 16 low-income countries took 51 percent.

Imports of farm products from the U.S. in 1960 also have been compared with per capita incomes of foreign countries. Preliminary estimates show that countries with relatively low incomes of \$100 to \$200 per capita imported \$1 to \$2 worth of farm products per capita from the United States. Countries with per capita incomes of \$800 to \$1,200 imported \$8 to \$12 of agricultural products per capita.

Food aid shipments were an important part of the imports from the U.S. to the underdeveloped countries in 1960. But the bulk of the food aid imports in most of these countries was sold through their commercial markets and thus, largely reflected an effective demand at the market prices in these countries.

C. Special Background Studies. Background analyses have been conducted to provide an informed basis for planning detailed studies on the effects of economic development on trade, with special reference to effects on market outlets for U.S. farm products in selected foreign countries. These studies will be conducted under contract with research institutions in foreign countries and will be financed under foreign market development programs of the Foreign Agricultural Service. Background analysis also has been conducted to provide an informed basis for planning studies relating to foreign agricultural development and related problems conducted under the Public Law 480 research program, administered by the Agricultural Research Service, with foreign currencies earmarked for use by the Economic Research Service. These projects are expected to provide findings that have application to agricultural economic problems in the United States as well as in foreign countries.

Four research projects are in progress under this program at present and negotiations are in progress to establish six additional projects within the next few months.

D. Analysis of the Role of Agriculture in Foreign Economic Development and Growth. Preliminary research on this project has been concentrated on the compilation of data and information relative to rates of expansion in agricultural output, changes in agricultural productivity, agriculture's share of gross national output, proportion of labor force engaged in agriculture, and other important measures. Special attention has been given to analysis of income elasticity of demand for food and farm products in order to obtain better estimates of expansion in supplies of agricultural products required as one of the important pre-conditions for economic development and growth. Preliminary analysis indicates that income elasticities of demand for food may average .7 or higher for most low-income countries. This analysis also is giving attention to prospective sources of supply of agricultural products to meet expanding demand that may be expected to accompany rising incomes and population growth. Special attention also has been given to the importance of better technology and production requisites for applying improved farm production practices in less developed countries.

E. Research Grants under 104K Program

1. Social Factors which Promote or Impede Changes in Agricultural Organization and Production. The field work is designed to identify the different social factors that affect success of different kinds of land settlement projects in Israel. Schedules and sampling procedures have been prepared and field survey work has been started.

2. Marketing Rice in Colombia. Initial work has consisted of personal interviews with handlers, processors, and distributors of rice in major consumption areas in order to provide an informal basis for developing schedules for use in collection of detailed data in field interviews.

3. Economics of Alternative Use of Land for Agriculture and Forestry. Research for this project was initiated in 1961. Comparative yields from land in crop and forestry uses on 324 farms in 4 different areas were obtained for the year ending March 1962. Procedures for measuring crop and forestry yields are being studied and data on yields are being analyzed to determine economy of crop versus forestry use of land in the study areas in Finland.

4. The Relation of Management and Planning to Success in Farming in Finland. Managerial decision-making processes are being observed on 62 case farms selected for detailed study. Comprehensive information including detailed farm business and technical data are being collected for each study farm in order to appraise economic success of managerial decisions. Statistical data collected thus far have limited significance because a long enough period has not elapsed in order to evaluate effects of managerial decisions. It is anticipated that the data being collected will have increasing significance as it becomes possible to observe results of managerial decisions over a longer period.

PUBLICATIONS

Agriculture in Foreign Economic Development Programs

(1) "Putting Science to Work to Improve World Food Production," Raymond P. Christensen and Robert D. Stevens in Food--One Tool in International Economic Development, assembled by Iowa State University Center for Agricultural and Economic Adjustment, Iowa State University Press, Ames, 1962.

(2) Discussion of Ways of Overcoming Obstacles to Farm Economic Development in Less Developed Areas, Raymond P. Christensen, a paper presented at the 1962 Annual Meeting of the American Farm Economic Association.

(3) Efficient Use of Labor, Land, and Capital for Agricultural Development of Densely Populated Areas, Sherman E. Johnson and Raymond P. Christensen, a paper prepared for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, February, 1963.

AREA NO. 3

TRADE STATISTICS AND ANALYSIS

Problem. A continuing analysis of U.S. agricultural trade, including Food-for-Peace shipments, is needed to detect trade trends and problems and to determine the relevant economic and other factors that affect this trade. This information is used to provide agricultural producers, trade groups, and Government officials with a flow of statistics and interpretative reports on the present status of and the outlook for U.S. agricultural exports and imports. These statistics and interpretative reports are in turn used in the formulation of policies, positions, and programs in the areas of foreign marketing of U.S. farm products and of competition, both at home and abroad, from foreign farm products. Some of these areas are the expansion of commercial foreign markets for the nation's agricultural abundance, adjustment of domestic price support and production controls to domestic and foreign demand, import fees and quotas to restrict imports detrimental to U.S. agriculture, trade agreement concessions to open new markets for agricultural products, the U.S. Food-for-Peace program to share the nation's bounty with friendly peoples abroad, and export payments to help make U.S. farm commodities competitive in world markets. More precise and complete statistical data can improve the scope and depth of interpretations used in arriving at decisions on these and other problems facing U.S. agriculture.

USDA PROGRAM

A. U.S. Agricultural Trade Situation. A continuing analysis of U.S. agricultural trade requires regular consultation and cooperation with various subject-matter specialists in commodity, regional, and program operations, daily research into news and other informational media, and development of estimates of U.S. agricultural exports and imports for current and future periods. Export estimates are undertaken monthly and annually; import estimates, annually; and Food-for-Peace, quarterly.

A monthly analysis of U.S. agricultural trade developments is undertaken, including estimates of the value and quantity of U.S. agricultural exports for the current month. The analysis consists of a determination of the quantity and value of total U.S. agricultural exports by principal commodities and major commodity groups along with an evaluation of factors and developments accounting for changes in agricultural exports compared with previous periods. In addition, an evaluation of the quantity and value of U.S. agricultural imports competitive (supplementary) and noncompetitive (complementary) with domestic production is undertaken.

A quarterly review of U.S. agricultural Food-for-Peace shipments abroad is made and includes an evaluation of the principal developments affecting such exports.

An annual appraisal of U.S. agricultural trade (calendar and fiscal year) including analyses of Food-for-Peace shipments and estimates of U.S. agricultural exports including Food-for-Peace shipments (fiscal year) are prepared. The continuing program includes evaluations of value of U.S. foreign trade for current and prior periods; quantity indexes of U.S. foreign trade

for current and prior periods; value of U.S. trade in selected agricultural commodities and groups for current and prior periods; value of U.S. foreign trade by countries of destination for current and prior periods; and quantity and value of U.S. agricultural trade by specified countries and principal agricultural products for current periods; and quantity and value of U.S. Food-for-Peace exports classified by programs for current and prior periods; value of U.S. Food-for-Peace shipments by countries of destination for current and prior periods.

B. U.S. and World Agricultural Trade Statistics. This program involves the assembly, tabulation, and summarization of U.S. agricultural export and import statistics, including Food-for-Peace exports, and includes the interpretation of agricultural trade by commodity, country, commodity by country, and country by commodity. Compilations are made also of world agricultural trade from various sources and in instances involve the exercise of considerable judgment in classifying data into comparable categories for purposes of analysis.

C. Contracts, Bureau of Census and Agency for International Development for Data Processing of Trade Statistics. Electronic data processing projects, including high-speed numerical and alphabetic summaries of U.S. agricultural exports and imports, commodity by country and country by commodity, are being undertaken to facilitate interpretations of the current situation of U.S. agricultural trade.

The total Federal scientific effect devoted to research in this area is 7 professional man-years. Of this number 5.0 is devoted to U.S. Agricultural Trade Situation; 1.5 to U.S. World Agricultural Trade Situation; and 0.5 to contracts with Bureau of the Census and Agency for International Development.

RELATED PROGRAMS OF STATE EXPERIMENT STATIONS AND INDUSTRY

Current research by State Experiment Stations in this area is discussed under this heading in Area No. 1 of this unit: Appraisal of Foreign Market Programs.

Industry and other organizations do not report work in this area.

REPORT OF PROGRESS FOR USDA AND COOPERATIVE PROGRAMS

A. U.S. Agricultural Trade Situation

1. Record agricultural exports in 1961-62. A continuing analysis of the current status of and outlook for U.S. agricultural exports reveals that exports for the fiscal year that ended June 30, equaled \$5.1 billion, 4 percent above the previous year's record of \$4.9 billion. Volume equaled the previous record in 1960-61. The value of agricultural exports that moved for dollars came to an estimated \$3.5 billion, also the largest in history while the value of Food-for-Peace exports equaled an estimated \$1.6 billion. Sales for dollars accounted for over half of the total gain in U.S. agricultural exports in 1961-62 compared with 1960-61. Most of the increase in total exports in 1961-62 over the previous year was brought about by wheat and feed grains, the leading U.S. farm surplus commodities.

Exports of wheat including flour set a new record estimated at 716 million bushels in 1961-62, up 55 million from 1960-61.

Exports of feed grains advanced to a record 14 million metric tons, up 3 million tons from 1960-61. Dollar sales rose to Western Europe where livestock production is increasing and to Canada to supplement drought reduced supplies. Increased exports to Japan also contributed to the overall rise.

Other increases were achieved in exports of soybeans, edible vegetable oils, fruits and preparations, meat, protein meal, tobacco, and vegetables and preparations.

Exports of cotton represented the only major commodity that suffered a decline in fiscal year 1961-62, compared with the previous fiscal year. Exports were 4.8 million bales in 1961-62, down 2.2 million bales from the near record total of 1960-61, with the biggest declines taking place in the industrialized countries. For other commodities, reductions in exports occurred for rice, lard, flaxseed, and dairy products.

The export record in fiscal year 1961-62 represented 15 percent of total cash receipts from farm marketings. The foreign market provided an outlet for over half of the wheat, rice, and dried peas produced; two-fifths of the tallow; and around a third of the tobacco, cotton, soybeans (including bean equivalent of oil), nonfat dry milk, and hides and skins.

Continued advances in economic activity in the industrialized countries of Western Europe contributed most to the record level of exports in the past year. Economic activity in Western Europe increased 4 percent. Record amounts of gold and dollars held by many U.S. trading partners indicated the availability of foreign purchasing power. In addition, exports were encouraged by the vigorous market promotion program carried out jointly by USDA and industry groups, the redoubled efforts to negotiate favorable trade access terms, and competitive pricing of export commodities, in some cases through the use of export payments.

2. Agricultural imports increased in fiscal 1961-62 over 1960-61. A continuing analysis shows that imports for consumption for the year ending June 30, 1962 rose to \$3.8 billion, a gain of 3 percent from \$3.6 billion a year earlier. Quantity was up 7 percent. Divergent movements left supplementary (partially competitive) products ahead 13 percent in value and 15 percent in quantity and complementary (noncompetitive) products 6 percent less in value though 1 percent larger in volume than last year. Increases in the value of supplementary imports were attributed primarily to increased imports of animals and animal products such as dutiable cattle, beef and veal, apparel wool, and hides and skins. Lower prices for most of the complementary imports resulted in value reductions for coffee, cocoa beans, crude natural rubber, and carpet wool.

3. State by State agricultural exports studied. The results of a nationwide study, which breaks down the record-level 1960-61 U.S. agricultural exports of nearly \$5 billion, shows that each of 48 States (Alaska and Hawaii are not included) has a significant share of total exports of farm products to world markets.

The two States with the largest shares of agricultural exports were California (\$477.5 million) and Texas (\$446.5 million). Other important agricultural exporters were Illinois (\$320 million), Iowa (\$248 million), North Carolina (\$210.5 million), and Kansas (\$204 million). Many other States also have large shares of the farm export market.

Agricultural exports of \$5 billion exceeded by more than $2\frac{1}{4}$ times the \$1.8 billion worth of competitive or semi-competitive agricultural products which the U.S. imported in 1960-61. (Total agricultural imports came to \$3.6 billion. The other half of this total was made up of noncompetitive imports such as bananas, coffee, tea, rubber, cocoa, spices, and such products not grown in the U.S.)

B. U.S. and World Trade Statistics

1. Common Market Source Book developed. In order to provide essential statistical and other material for analyzing the impact of the EEC's new Common Agricultural Policy (CAP) on U.S. agricultural trade, a Common Market "Source Book" has been compiled showing agricultural imports of the EEC from all countries of the world as well as information on financial trends of the EEC countries. The trade data include annual commodity summaries, quantity and value, for the years 1951 through 1960. The newly emerging European Economic Community (EEC) -- better known as the Common Market -- has become one of the major economic areas of the world. The EEC poses both agricultural trade opportunities and problems to U.S. agriculture. The potential for increased agricultural trade is improved for some U.S. farm exports; for others the prospect appears unfavorable, because the EEC policy strongly favors internal suppliers over outside suppliers. Of the \$1.2 billion worth of U.S. farm exports to the Common Market countries and associate member Greece, approximately 30 percent will be affected by the EEC's variable import levy.

C. Contracts

1. Contracts with Bureau of Census and other Agencies. Electronic data processing work was expanded during the fiscal year 1962. The statistical work for the study on the impact of agricultural exports and imports by State and Congressional District for use in the Administration's export expansion program was compiled by electronic data processing. Additional work was contracted with the Bureau of the Census to provide summaries of U.S. agricultural trade with the European Economic Community and other countries that are potential members.

D. Other

1. Improved and expanded services. In addition to the basic analytical and statistical portion of the project, a number of significant achievements during the year resulted, or will result, in improved and increased service to the public and other Government agencies. These include consolidation of several series of published reports into a single monthly publication with annual statistical supplements; analysis of agricultural exports under the Commodity Credit Corporation export payment program; analysis of feasibility of granting export subsidies on certain processed agricultural commodities; analysis of the world cereal grain trade for the Senate Joint Economic Committee; analysis of the effect of tariff reductions on foreign trade in U.S. cotton, raisins, and almonds; assistance to the Federal Extension

Service in the preparation of a set of leaflets on World Trade-What are the Issues; and study of Public Law 480 and export payment programs, dollar sales, and total exports for a 7-year period for the Intergovernmental Relations Subcommittee of the House Committee on Government Operations.

PUBLICATIONS

U.S. Agricultural Trade Situation

(1) Foreign Agricultural Trade of the United States. Monthly, January 1961 through September 1962. DTA-4.

(2) Foreign Agricultural Trade of the United States Digest. Monthly, April 1961-May 1962. DTA-4.

(3) Foreign Agricultural Trade of the United States. Commodity Totals, Calendar Year 1960. June 1961. DTA-4.

(4) U.S. Agricultural Exports under the Food for Peace Program, July-March 1960-61. Eleanor N. DeBlois. Foreign Agriculture, ERS-Foreign-13, July 1961. DTA-4.

(5) Foreign Agricultural Trade of the United States. Trade by Countries, Calendar Year 1960. August 1961. DTA-4.

(6) Europe and Asia Take Most of 1960 U.S. Agricultural Gains. Foreign Agricultural Economics, ERS-Foreign-15, August 1961. DTA-4.

(7) Foreign Agricultural Trade of the United States. Imports of Fruits and Vegetables under Quarantine, Fiscal Year 1960-61. October 1961. DTA-4.

(8) Foreign Agricultural Trade of the United States. Commodity Totals, Fiscal Year 1960-61. December 1961. DTA-4.

(9) Export Factsheet, Fiscal Year 1961. December 1961. DTA-4.

(10) 1960 Government Program Shipments Totaled 30 Percent of Agricultural Exports. Foreign Agricultural Economics, ERS-Foreign-20, January 1962. DTA-4.

(11) 1962 Prospects for Overseas Markets. Agricultural Marketing, Vol. 7, No. 1, January 1962. DTA-4.

(12) Foreign Market Prospects Look Good for '62. Agricultural Situation, Volume 46, No. 1, January 1962. DTA-4.

(13) Foreign Agricultural Trade of the United States. Trade by Countries, Fiscal Year 1960-61. February 1962. DTA-4.

(14) Impact of Foreign Agricultural Trade by States and Congressional Districts. March 1962. DTA-4.

(15) Import Factsheet, Fiscal Year 1961. March 1962. DTA-4.

(16) 1961 U.S. Agricultural Exports Set Record; Imports at 12-Year Low. Foreign Agricultural Economics, ERS-Foreign-30 April 1962.

(17) Foreign Agricultural Trade of the United States. Commodity Totals, Calendar Year 1961. May 1962.

(18) U.S. Farm Exports Hit Record in 1960-61; Only Latin American Purchases Fall. Foreign Agricultural Economics, ERS-Foreign-36,

(19) 1961-62 U.S. Farm Exports Set Records in Value and Volume. Dewain H. Rahe. Foreign Agricultural Trade of the United States, August 1962.

(20) Exports Under Government-Financed Programs and Commercial Exports, Calendar Year 1961. Eleanor N. DeBlois. Foreign Agricultural Trade of the United States, August 1962.

(21) New U.S. Farm Export Record. Dewain H. Rahe. Foreign Agriculture, September 1962.

(22) The Agricultural Outlook for 1962. Presented at the 39th Annual Agricultural Outlook Conference, Washington, D.C., November 13, 1961. Contributed material on the foreign agricultural trade outlook for fiscal year 1961-62, joint author Robert L. Tontz with James P. Cavin and others.

(23) "Foreign Market Prospects Look Good for '62," Robert L. Tontz. Vol. 46, No. 1, Agricultural Situation, Statistical Reporting Service, USDA, January 1962, pp. 9-10.

(24) "1962 Prospects for Overseas Markets," Robert L. Tontz, Vol. 7, No. 1, Agricultural Marketing, Agricultural Marketing Service, USDA, January 1962, pp. 6-7.

General

(25) "The Farm Surplus and Tariff Reform." Robert L. Tontz, and Alex D. Angelidis. Current History, August 1962.

(26) "Friends and Partners." Alex D. Angelidis and Robert L. Tontz. The Yearbook of Agriculture, 1962.

(27) "Helping to Feed and Clothe the World." Robert L. Tontz and Harry W. Henderson. The Yearbook of Agriculture, 1962.

Line Project Check List -- Reporting Year October 1, 1961 to September 30, 1962

Work & Line Project Number	Work and Line Project Titles	Work Locations During Past Year	Line Project Incl. in	
			Summary of Progress (Yes-No)	Area & Sub- heading
DTA 1	Foreign Economic Development Research	Washington, D.C.	Yes	2-A,C
DTA 1-1	Analyses of the Role of Agriculture in Foreign Economic Development and Growth	Washington, D.C.	Yes	2-D
DTA 1-2	Social Factors Which Promote or Impede Changes in Agriculture Organization and Production	Hebrew University, Israel	Yes	2-E-1
S5-ERS-2(a)	Marketing Rice in Colombia	Bogota, Colombia	Yes	2-E-2
E8-ERS-1	The Relation of Management and Planning to Success in Farming	Helsinki, Finland	Yes	2-E-4
E8-ERS-2	Study of the Economics of Alternative Use of Land for Agriculture and Forestry	Helsinki, Finland	Yes	2-E-3
DTA 2	Foreign Economic Export Programs Research	Washington, D.C.	Yes	1-A-1-5
DTA 2-1	Analysis and Assessment of the Effectiveness of Title I, P.L. 480 Operations in Israel	Tel Aviv, Israel	Yes	1-A-1
DTA 2-2	Analysis and Assessment of the Effectiveness of Title I, P.L. 480 Operations in Turkey	Ankara and Istanbul, Turkey	Yes	1-A-2
DTA 2-3	Analysis and Assessment of the Effectiveness of Title I, P.L. 480 Operations in Colombia	East Lansing, Michigan; Bogota and Medellin, Colombia	Yes	1-A-3
DTA 2-4	Analysis and Assessment of the Effectiveness of Title I, P.L. 480 Operations in Spain	Madrid, Spain	Yes	1-A-4
DTA 2-5	Analysis and Assessment of the Effectiveness of Title I, P.L. 480 Operations in India	Poona, India	Yes	1-A-5
DTA 3	International Monetary Research	Washington, D.C.	Yes	1-B-1,2
DTA 3-1	Analysis of the Role of Agricultural Credits in the Development of the Agricultural Economy	Washington, D.C.	Yes	1-B-3
DTA 4	Trade Statistics and Analysis	Washington, D.C.	Yes	3-A-D
DTA 4-1	Analysis of U.S. Agricultural Trade	Washington, D.C.	Yes	3-A-1-3